Work Ord March-28-13 1				*99	141*						Page 1
Item ID: Revision ID: Item Name: 2.2	<del>"</del> .			Accept	*N900	<b>040</b>	100	<b>)*</b> s	etup Star Sto	171	S1* S2*
Start Date: Required Date Reference:	3/22/13 : 3/27/13	Start Qty: 50.00 Req'd Qty: 50.00	*5( *5(		Cust Item I Customer:	D:					
Approvals:	Process P	lan:	Date:	Tooling:	Da	ate:	-	R	dun Stai	17	R1*
	QC:		Date:	SPC (Y/N):	Da	ate:			Sto	` *N	R2*
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Re	evision Nbr		÷							
D3903	В										
*100  *100  Hardinge  *Hardinge CNC Lat	he Small	<b>Memo</b> I-TURN AS FOLIO REV DWG REV:		0.00 0.00 & DWG D3903,	13-4-4			53	$\phi$		DAG 13
	^å.	2-DEBURR	AS REQUIRED								
*110 *110* QC Quality Control		QC2- Inspect parts off m  Memo	achine FAI/FAIB	0.00	13-4-4			[2	J.		DAS 13
		•			j j						

**WORK ORDER NON-CONFORMANCE / UPDATE** NCR: Yes / No QA Closed: Date: AGAINST DEPARTMENT/PROCESS DISPOSITION Work Order: Engineering Skid-tube Crosstube Water Jet Rework Small Fab Machining Prod. Eng. Coor. Quality Part No. Scrap Other Thermoforming Finishing Rec/Store/Packaging Use-as-is Supplier NCR No. Large Fab Composite Work Order Update Description of work order update Initial Action Sign & Root **Verification** Step or Non-conformance Chief Eng Description Date QC Inspector Qty Cause Date Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Grain Pressure/Forced Ovalized Bend Bending BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Weld Cracks Broken/Damaged Inspection Incomplete Part Incorrect Wrong Stock Pulled Part Lost/Missing Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Moved Contamination Maintenance Cuffs Positioned Wrong Mislabeled Heat Treat Countersink Power Loss/Surge Other Inspection Strip in Tube Misread Cut Too Short Ripples in Bend **Drill Holes** Offset Torque Waves in Extrusion Drawing Out of Calibration Out of Sequence Turning Sequence **Finish** 

Outside Dimensions

Date:

DQA:

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde		141		*991	141*							Page 2
Item ID: Revision ID: Item Name:	D3903-1 Spacer			Accept	*N900	<u>040</u>	100	)*	Setup	Start Stop	ı u,	S1* S2*
Start Date: Required Date: Reference:	3/22/13	Start Qty: 50.00 Req'd Qty: 50.00	*50* *50*		Cust Item I	ID:					IV.	
Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):		ate:			Run	Start Stop		R1* R2*
Sequence ID/ Work Center II	D	Operation Description QC8- Inspect parts - seco	nd check	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accep Qty	t Rej Qty		Reject Number	Insp. Stamp
*120* QC Quality Control		Memo	nd check	0.00				53		,	<u></u>	JL 13-4-E
126				0.00								
*125 *125* Skidtubes Skidtubes		<b>Memo</b> Clean spacer Batch:	s with Ultra Aluminum C	0.00 0.00 leaner	·		•	53	\$	2	Be	E13-04-K
130		Identify as per dwg & Sto	ock Location: <u>L</u> G	0.00			,		)			
*130* Packaging		Memo		0.00		•		53	; 	0	BEI	3-04-12

Packaging

									DQA:	Date:				
NCR: Yes	/ No				WORK ORDER NON-C	ONFOR	MANCE / UP		QA Closed:	Date:				
Work Order:	- 1				<b>DISPOSITION</b> Rework	AGAINST DEPARTMENT/PROCESS  Skid-tube Crosstube Water Jet Engineering								
Part No.					Scrap Use-as-is	Ther	Machining moforming	Small Fab Finishing		d. Eng. Coor. re/Packaging	Quality Other			
NCR No.					Work Order Update Large Fab Composite					Supplier				
Root				Descri	ption of work order update	Initial	Ac	tion	Sign &					
Cause	Date	Step	Qty		or Non-conformance	Chief En	Desc.	ription	Date	Verification	QC Inspector			
Doc/Data														
Equip/Tooling				l										
Operator														
Material														
Şetup														
Other														

Landin	g Gear	General		_		-		
Γ	Bending	Bend		Grain		Ovalized	Pre	essure/Forced
	Centre Not Concentric to O/S	BOM/Route		Hardware		Over/Under tolerance	Те	mperature/Cure
Γ	Cracks	Broken/Damaged	L.	Inspection Incomplete	L	Part Incorrect	∐w₁	eld
F	Crushed/Crimped.	Burrs		Instructions Incomplete/Unclear		Part Lost/Missing	W	rong Stock Pulled
Γ	Cuffs	Contamination		Maintenance	L	Part Moved		
. [	Heat Treat	Countersink		Mislabeled		Positioned Wrong		
Γ	Inspection Strip in Tube	Cut Too Short		Misread		Power Loss/Surge	Ot	ther
	Ripples in Bend	Drill Holes		Offset				
Γ	Torque Waves in Extrusion	Drawing		Out of Calibration				
Ī	Turning Sequence	Finish		Out of Sequence				
	Wave/Twist in Tube	Folio		Outside Dimensions				

**FAULT CATEGORY** 

Process
Supplier
Training
Unapproved

Work Ordo					*991	41*						A country to the coun	Page 3
Item ID: Revision ID: Item Name:	D3903-1 Spacer			A	ccept	*N900	<b>040</b>	100	)*	Setup	Start Stop		S1* S2*
Start Date: Required Date: Reference:	3/22/13 3/27/13	Start Qty: 50.00 Req'd Qty: 50.00		50* 50*	·.	Cust Item I Customer:	D:						
Approvals:	Process D	Plan:	Date:		Tooling: _ SPC (Y/N):		ite:			Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center II	D	Operation Description QC21- Final Inspection -	Work Order Rel	lease	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accep Qty	ot Rej Qty		Reject Number	Insp. Stamp
*14 <b>0</b> *		Memo			0.00				-11		2/4	כון ז	4

Memo

Quality Control

				WOOK ORDER NON	CONFOR	AANCE LUDDATE	DQA:	Date:	
NCR: Yes	/ No			WORK ORDER NON-	CONFORI	VIANCE / UPDATE	QA Closed:	Date:	
Work Order:			*** Ja	DISPOSITION		AGAINS	T DEPARTMENT,	PROCESS	
Work Order.				Rework	7	Skid-tube Crosstub	e	Water Jet	Engineering
Part No.				Scrap		Machining Small Fa	b Pro	d. Eng. Coor.	Quality
				Use-as-is	Thern	noforming Finishin	g Rec/Sto	re/Packaging	Other
NCR No.				Work Order Update	]	Large Fab Composit	e	Supplier	
Root				Description of work order update	Initial	Action	Sign &		
Cause	Date	Step	Qty	or Non-conformance	Chief Eng	Description	Date	Verification	QC Inspector
Doc/Data									
Fauin/Tooling	1	l			1				

## General **Landing Gear** Pressure/Forced Ovalized Bend Grain Bending Temperature/Cure Over/Under tolerance BOM/Route Centre Not Concentric to O/S Hardware Part Incorrect Weld Broken/Damaged Inspection Incomplete Cracks Part Lost/Missing Wrong Stock Pulled Crushed/Crimped. Instructions Incomplete/Unclear Burrs Maintenance Part Moved Cuffs Contamination Positioned Wrong Countersink Mislabeled Heat Treat Other Power Loss/Surge Misread Inspection Strip in Tube Cut Too Short Offset Drill Holes Ripples in Bend Out of Calibration Torque Waves in Extrusion Drawing Out of Sequence Finish Turning Sequence Folio Outside Dimensions Wave/Twist in Tube

**FAULT CATEGORY** 

Operator
Material
Setup
Other
Process
Supplier
Training
Unapproved

## **Picklist Print**

March-28-13 12:55:00 PM

Work Order ID:

99141

Parent Item:

D3903-1

Parent Item Name:

Spacer

**Start Date:** 3/22/13

Required Date: 3/27/13

**Start Qty: 50.00** 

Required Qty: 50.00

Comments:	IPP RevA: New iss	ue DD verified by	y:EC						•				
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6T0.375W.058	05011	Purchased	No			100	f	384.8490	0.345	18.157895	· · · · · · · · · · · · · · · · · · ·		D40
6061-T6 RD Tube .375 x.	.038 W			Location		Loc Qty	<u>Lo</u>	c Code		1	3-6	1-4	
•				MAT014		384.849							
				1169	20	1.156							•
				1190	87	0.11							
				1233	03	8							
				1234	49	249.8							
	•			1238	44	111.517			77	14			
				1240	69	14.266			€	6			

Page 1

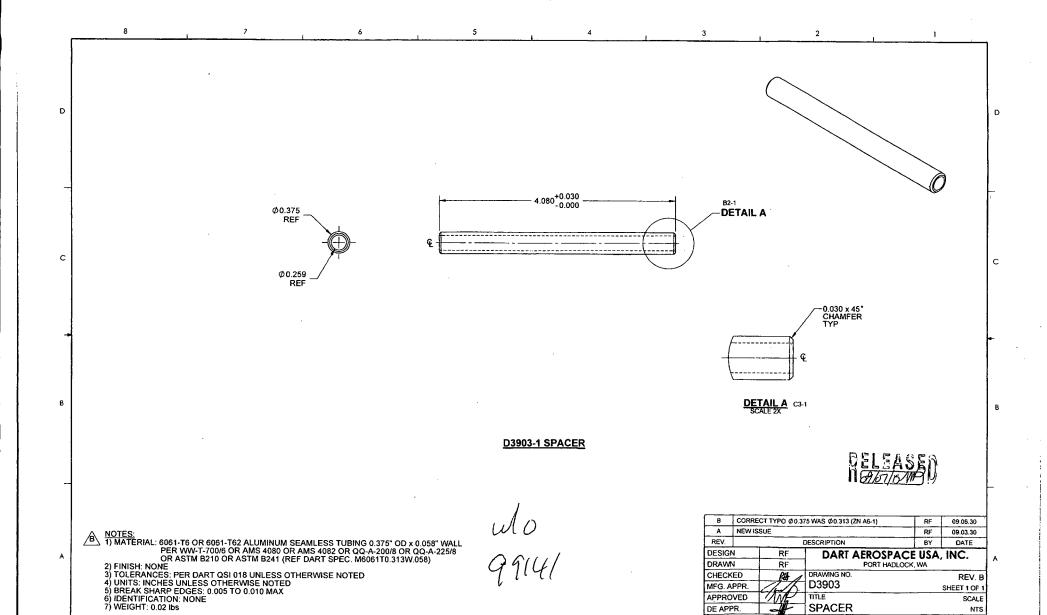
										DQ	A: Da	ate: _	
NCR:	res / No		1		WORK ORDER NON-C	ON	<b>VFORM</b>	MANCE / UI	PDATE				
							,			QA Close	d: Da	ite:	v com
Work Orde	er:				DISPOSITION		AGAINST DE			EPARTMEN	IT/PROCESS		
Part N					Rework Scrap Use-as-is		ſ	Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet rod. Eng. Coor. tore/Packaging		Engineering Quality Other
NCR N	No				· <u> </u>			Large Fab	Composite	]	Supplier		
Root				Descri	ption of work order update		nitial	А	ction	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Des	cription	Date	Verification	n n	QC Inspector
Doc/Data												İ	
Equip/Tooling													
Operator						Ì						1	
Material		1 1										1	
Setup		1 1	1										
Other													
Process			1 .										
Supplier				ļ									
Training			İ							1		İ	
Unapproved			<u> </u>	<u> </u>							<u> </u>		A-18-18-18-18-18-18-18-18-18-18-18-18-18-
						AUL	T CATE	GORY		<del></del>			
Landi	ng Gear	, ,			General		1		_	٦,		$\overline{}$	
	Bending	-		<u></u>	Bend	$\vdash$	Grain			Ovalized		$\vdash$	Pressure/Forced
	Centre N	ot Conce	entric to	O/S	BOM/Route		Hardwa				ler tolerance		Temperature/Cure
	Cracks				Broken/Damaged	$\vdash$		on Incomplete		Part Incor		$\vdash$	Weld
	Crushed/	'Crimpec	d. ,		Burrs		Instruct	ions Incomplete	e/Unclear	Part Lost/	_		Wrong Stock Pulled
	Cuffs				Contamination		Mainte	nance	_	Part Mov			
	Heat Tre	at			Countersink		Mislabe	eled		Positione	_		
	Inspection	1	n Tube		Cut Too Short		Misread	t	L	Power Lo	ss/Surge		Other
	Ripples ii	n Ben <mark>d</mark>			Drill Holes		Offset			-			
	Torque V	Vaves in	Extrusio	n [	Drawing -		Out of (	Calibration					
	Turning S	Sequence	e		Finish		Out of S	Sequence					
	Wave/Tv	vist in Tu	ıbe		Folio		Outside	Dimensions					

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	9914/
Description: Spacer	Part Number:	D3903-1
Inspection Dwg: D3903 Rev: B		Page 1 of 1

Inspection Dwg:	: D3903 <b>Rev</b>	:B				Page 1 of 1
	<del></del>	T ARTICLE INSP		HECKL ototype		
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.375	+0.006/-0.00	1 775			12-42	1014
Ø0.259	+0.006/-0.00	1 .257				
4.080	+0.030/-0.00					
0.030 x 45°	+/-0.010 x 0.5	5° 033 X42°				
-						
						·
						<u></u>
						<u> </u>
	6.7					
Measured by:	<b>%</b> ₩ %₩ %₩	Audited by:	,.	Prot	otype Approval	: N/A
Date:	7-4-4		-04-04		Date	<del> </del>
Rev Date	Change				Revised I	ov Approved
Nev Date	Manage	<del></del>			Revised I	y Approved

Rev	Date	Change	Revised by	Approved
Α	09.10.01	New Issue	KJ 👭	W
			$\overline{}$	



TITLE

**SPACER** 

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SCALE

NTS

APPROVED

DE APPR.

DATE

09.06.30